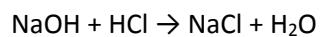


Answer on Question#37392 - Chemistry - Inorganic Chemistry



The amount of HCl is:

$$n = C \cdot V = 0.5 \text{ M} \cdot 0.025 \text{ l} = 0.0125 \text{ mol}$$

As we see from the reaction equation, the amount of substance of NaOH required to neutralize 0.0125 mol of HCl is the same.

So, mass of NaOH is

$$m = n \cdot M = 0.0125 \text{ mol} \cdot 40 \text{ g/mol} = 0.5 \text{ g}$$

Answer: 0.5g